In the Specification

Please amend page 1, line 3, by inserting the following:

-- This application is a filing under 35 U.S.C. 371 of international application number PCT/GB2003/005576, filed December 19, 2003, which claims priority to application number 0229695.2 filed December 20, 2002, in Great Britain the entire disclosure of which is hereby incorporated by reference.--

Please amend page 20, line 1 as follows:

~~Claims~~ **What is claimed is:**

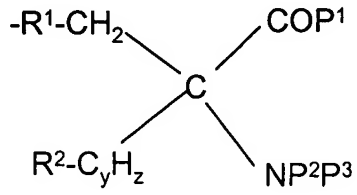
This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A process for the production of an ^{18}F-labelled tracer which comprises treatment of a solid support-bound precursor of formula (I):

SOLID SUPPORT-LINKER-SO_2-O -TRACER (I)

wherein the TRACER is of formula (A):



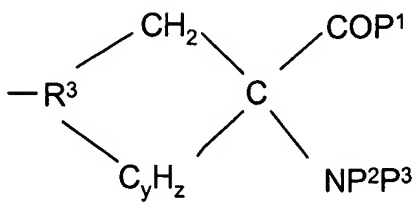
(A)

wherein P^1 is hydroxy or a protecting group, P^2 and P^3 are independently hydrogen or a protecting group, R^1 is a bond, -CH=CH-, or together with R^2 forms R^3;

R^3 is $-(CH)_j-C_mH_n-CH_q$ with $(CH_2)_x$-

R^2 is hydrogen or together with R^1 forms R^3;

such that



is formed

wherein x is 0 or 1;

y is 1 or 2;

z is 1, 2, 3, or 4 and z>y if y is 2;

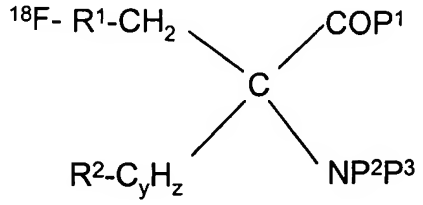
q is 1 or 0 if n is 1 and j is 0;

n is 1 or 2, but 0 if m is 0;

m is 0 or 1; and

j is 0 or 1;

with $^{18}F^-$ to produce the labelled tracer of formula (II)



(II)

wherein R^1, R^2, y, z, P^1, P^2 and P^3 are as defined for the compound of formula (I), optionally followed by

(i) removal of excess $^{18}F^-$, for example by ion-exchange chromatography; and/or

(ii) removal of any protecting groups; and/or

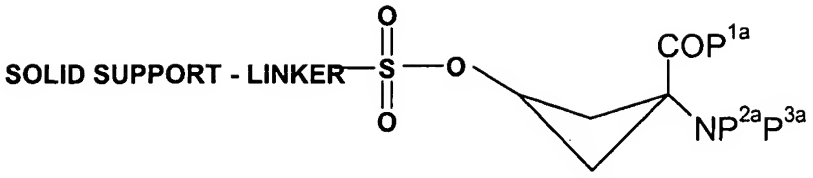
(iii) removal of organic solvent; and/or

(iv) formulation of the resultant compound of formula (II) as an aqueous solution

2. (Original) A process for the production of an ^{18}F-labelled tracer according to claim 1 wherein R^1 and R^2 form the group R^3.

3. (Currently amended) A process for the production of an ^{18}F-labelled tracer according to claim 1 ~~or 2~~ wherein R^1 and R^2 form the group R^3 and x is 0, y is 1, z is 2, q is 1, m is 0 and j is 0.

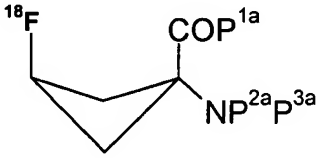
4. (Currently amended) A process according to ~~any one of claims 1 to 3~~ claim 1 for the production of [^{18}F]-1-amino-3-fluorocyclobutane-1-carboxylic acid ([^{18}F]-FACBC) which comprises treatment of a solid support-bound precursor of formula (Ia):



(Ia)

wherein P^{2a} and P^{3a} are each independently hydrogen or a protecting group, and P^{1a} is hydroxyl or a carboxylic acid protecting group;

with $^{18}F^-$ to produce the labelled tracer of formula (IIa)



(IIa)

wherein P^{1a}, P^{2a}, and P^{3a} are each as defined in Formula (Ia);

optionally followed by

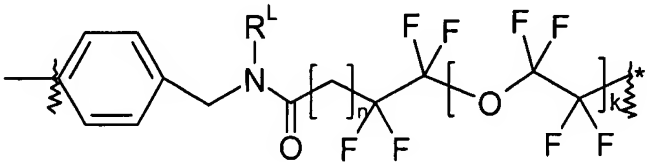
(i) removal of excess $^{18}F^-$, for example by ion-exchange chromatography; and/or

(ii) removal of the protecting groups; and/or

(iii) removal of organic solvent; and/or

(iv) formulation of the resultant compound of formula (IIa) as an aqueous solution.

5. (Original) A process according to claim 4 wherein the LINKER in the compound of formula (Ia) is



wherein k is an integer of 0 to 3, n is an integer of 1 to 16, and R^L is hydrogen or C_{1-6} alkyl.

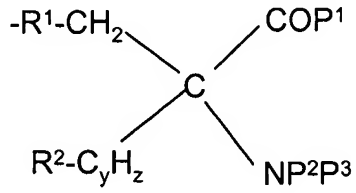
6. (Currently amended) A process according to claim 4 ~~or 5~~ in which P^{1a} is C_{1-6}alkoxy, P^{2a} is hydrogen or C_{1-6}alkoxycarbonyl, and P^{3a} is C_{1-6}alkoxycarbonyl.

7. (Currently amended) A process for the production of a ^{18}F-labelled tracer of formula (II) ~~or (IIa)~~, according to ~~any one of claims 1 to 6~~ claim 1, for use in PET.

8. (Original) A compound of formula (I)

SOLID SUPPORT-LINKER-SO_2-O -TRACER (I)

wherein the TRACER is of formula (A):



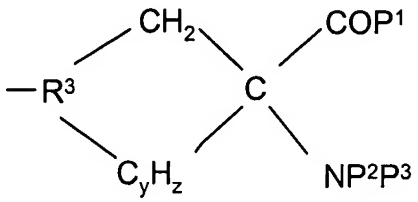
(A)

wherein P^1 is hydroxy or a protecting group, P^2 and P^3 are independently hydrogen or a protecting group, R^1 is a bond, -CH=CH-, or together with R^2 forms R^3;

R^3 is $-(CH)_j-C_mH_n-CH_q<^{(CH_2)_x-}$

R^2 is hydrogen or together with R^1 forms R^3;

such that



is formed

wherein x is 0 or 1;

y is 1 or 2;

z is 1, 2, 3, or 4 and z>y if y is 2;

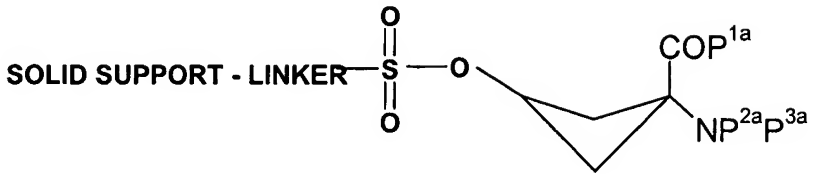
q is 1 or 0 if n is 1 and j is 0;

n is 1 or 2, but 0 if m is 0;

m is 0 or 1; and

j is 0 or 1.

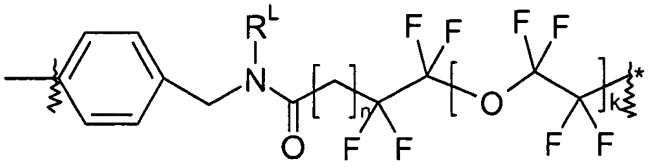
9. (Original) A compound of formula (Ia):



(Ia)

wherein P^{2a} and P^{3a} are each independently hydrogen or a protecting group, and P^{1a} is hydroxyl or a protecting group.

10. (Currently amended) A compound according to claim 8 ~~or 9~~ in which the LINKER is



wherein k is an integer of 0 to 3, n is an integer of 1 to 16, and R^L is hydrogen or C_{1-6} alkyl.

11. (Currently amended) A compound according to ~~any one of claims 8 to 10~~ claim 8, in which P^{1a} is C_{1-6}alkoxy, P^{2a} is hydrogen or C_{1-6}alkoxycarbonyl, and P^{3a} is C_{1-6}alkoxycarbonyl.

12. (Currently amended) A radiopharmaceutical kit for the preparation of an ^{18}F-labelled tracer for use in PET, which comprises:

(i) a vessel containing a compound of formula (I) or (Ia) as defined in ~~any one of claims 1 to 6~~ claim1; and

(ii) means for eluting the vessel with a source of $^{18}F^-$;

(iii) an ion-exchange cartridge for removal of excess $^{18}F^-$; and optionally

(iv) a cartridge for solid-phase deprotection of the resultant product of formula (II) or (IIa) as defined in ~~any one of claims 1 to 6~~ claim1.

13. (Currently amended) A cartridge for a radiopharmaceutical kit for the preparation of an ^{18}F-labelled tracer for use in PET which comprises:

(i) a vessel containing a compound of formula (I) ~~or (Ia)~~ as defined in ~~any one of claims 1 to 6~~ claim 1; and

(ii) means for eluting the vessel with a source of $^{18}F^-$.

14. (Currently amended) A method for obtaining a diagnostic PET image which comprises the step of using a radiopharmaceutical kit according to claim 12 ~~or a cartridge for a radiopharmaceutical kit according to claim 13~~.

15. (New) A method for obtaining a diagnostic PET image which comprises the step of using a cartridge for a radiopharmaceutical kit according to claim 13.